

Everything in the first group is solid. The second group is liquids. The third is gases. The fourth is plasmas. Solids, liquids, gases, and plasmas—these are the four states of matter. Everything within our knowledge is one or another of them.

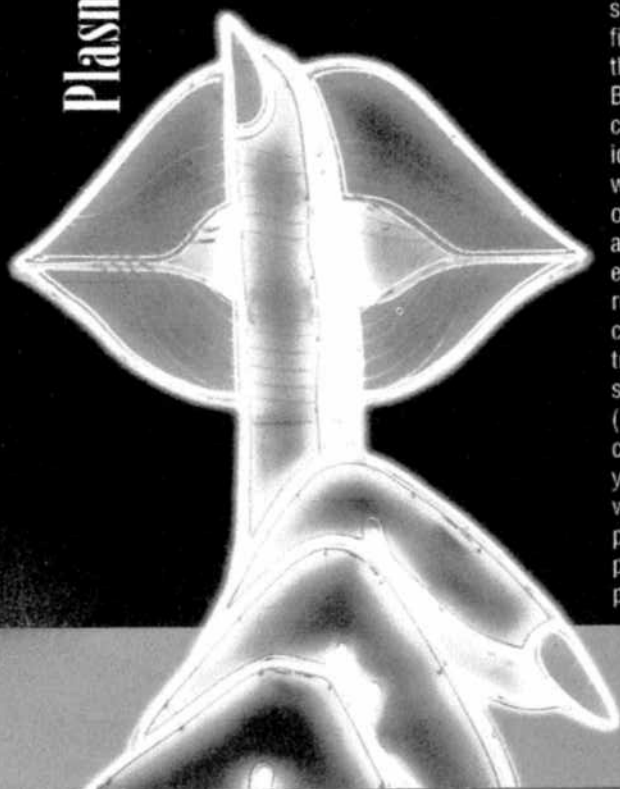
Gases

► **IF IT OCCUPIES** whatever container it has, it's a gas. Unlike liquids and solids, the molecules in a gas are spread out and so full of energy that they bounce around all over the place. That's why a gas fills its container.



For more information about solids, liquids, and gases, go to:
howstuffworks.com/question404

Plasmas



◀ **PLASMA IS LIKE** a gas in that it spreads out to fill the space that contains it. But plasma is composed of ions (atoms with a negative or positive charge) and free-moving electrons. As a result, plasma conducts electricity. If you have seen neon signs (left) and fluorescent lightbulbs, you have seen the workings of plasma. These products use plasma to pro-

duce light instead of the thin metal wire used in incandescent bulbs. Plasma TVs also use plasma technology to produce light and images.

► **PLASMA LAMPS,** like this one, have been used in movies and science fiction TV shows, as well as in novelty night-lights.

